

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/011963

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07C275/32 C07C279/18 C07C217/60 C07C233/25 C07C235/42  
C07C255/54 C07D213/82 C07D307/68 C07C311/08 C07C311/29  
C07C307/10 C07C317/22 A61K31/135 A61K31/165 A61K31/18

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07C C07D A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 03/091204 A (GLAXO GROUP LIMITED; BOX, PHILIP, CHARLES; COE, DIANE, MARY; LOOKER, B) 6 November 2003 (2003-11-06) the whole document	1-15
P, X	WO 2004/039766 A (GLAXO GROUP LIMITED; BIGGADIKE, KEITH; BLAKE, KEITH; COE, DIANE, MARY;) 13 May 2004 (2004-05-13) the whole document	1-15
P, X	WO 2004/037773 A (GLAXO WELLCOME HOUSE; CHAPMAN, ALAN, MICHAEL; GUNTRIP, STEPHEN, BARRY;) 6 May 2004 (2004-05-06) the whole document	1-15
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

11 March 2005

Date of mailing of the international search report

07/04/2005

Name and mailing address of the ISA

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# INTERNATIONAL SEARCH REPORT

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 2004/071388 A (GLAXO GROUP LIMITED; BIGGADIKE, KEITH; BOX, PHILIP, CHARLES; COE, DIAN) 26 August 2004 (2004-08-26) the whole document	1-15
Y	----- APPERLEY G H ET AL: "Selectivity of Beta-adrenoceptor agonists and antagonists on bronchial, skeletal, vascular and cardiac muscle in the anaesthetized cat" 1976, BRITISH JOURNAL OF PHARMACOLOGY, BASINGSTOKE, HANTS, GB, PAGE(S) 235-246 , XP000926140 ISSN: 0007-1188 the whole document	1-15
Y	----- US 4 992 474 A (SKIDMORE ET AL) 12 February 1991 (1991-02-12) the whole document	1-15
Y	----- IAKOVIDIS D ET AL: "Synthesis and beta-adrenoceptor agonist properties of (+/-)-1-(3',4'-dihydroxyphenoxy)-3-(3'',4' '-dimethoxyphenyl) ethylamino-2-propanol hydrochloride, (+/-)-R0363.HCl, and the (2S)-(-)-isomer" June 1999 (1999-06), EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY, EDITIONS SCIENTIFIQUE ELSEVIER, PARIS, FR, PAGE(S) 539-548 , XP004180361 ISSN: 0223-5234 the whole document	1-15

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP2004/011963

### Box II Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claim 10 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☒ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

## Continuation of Box II.1

Although claim 10 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

## Continuation of Box II.2

Claims Nos.: -

Present claims 1-15 relate to an extremely large number of possible compounds due to the fact that the term "physiologically functional derivatives" is vague and imprecise and leaves the skilled person in the art in doubt about the subject-matter for which protection is sought. For this reason lack of clarity within the meaning of Art. 6 PCT arises to such an extent as to render a meaningful search of the claims impossible. Furthermore, support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT is to be found, however, for only a very small proportion of the compounds claimed. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to the compounds of formulae (I) /(Ia) and their salts and solvates, as well as the use and the preparation of these compounds, salts and solvates.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/011963

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 03091204	A	06-11-2003	AU 2003222841 A1 WO 03091204 A1 EP 1497261 A1	10-11-2003 06-11-2003 19-01-2005
WO 2004039766	A	13-05-2004	WO 2004039766 A1	13-05-2004
WO 2004037773	A	06-05-2004	WO 2004037773 A1	06-05-2004
WO 2004071388	A	26-08-2004	WO 2004071388 A2	26-08-2004
US 4992474	A	12-02-1991	AR 244199 A1 AR 245687 A1 AR 247721 A1 AT 390611 B AT 129184 A AU 573212 B2 AU 2706484 A BE 899448 A1 BE 900835 A4 BG 61490 B2 CA 1335999 C CA 1336004 C CH 661497 A5 CH 667084 A5 CZ 9104028 A3 CY 1482 A CZ 285602 B6 DE 3414752 A1 DE 3448338 C2 DE 3448452 C2 DE 19575029 I2 DK 158092 A DK 201784 A ES 8505641 A1 ES 8609209 A1 FI 841548 A ,B, FR 2545482 A1 GB 2140800 A ,B GB 2176476 A ,B GR 79925 A1 HK 36889 A HU 200160 B IE 57237 B1 IL 71569 A IT 1199112 B JP 1862136 C JP 5069817 B JP 63264443 A JP 1643826 C JP 3000858 B JP 59199659 A JP 2001385 C JP 6087800 A JP 7029997 B KE 3864 A KR 9204186 B1 LU 85329 A1 LU 88265 A9	29-10-1993 28-02-1994 31-03-1995 11-06-1990 15-11-1989 02-06-1988 25-10-1984 18-10-1984 17-04-1985 30-09-1997 20-06-1995 20-06-1995 31-07-1987 15-09-1988 12-05-1993 08-12-1989 15-09-1999 18-10-1984 19-05-1993 05-01-1994 07-11-2002 30-12-1992 19-10-1984 01-10-1985 16-12-1986 19-10-1984 09-11-1984 05-12-1984 31-12-1986 31-10-1984 12-05-1989 28-04-1990 17-06-1992 30-10-1987 30-12-1988 08-08-1994 01-10-1993 01-11-1988 28-02-1992 09-01-1991 12-11-1984 20-12-1995 29-03-1994 05-04-1995 19-05-1989 30-05-1992 04-06-1985 03-02-1994

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Information on patent family members

International Application No

PCT/EP2004/011963

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4992474	A	MX 9203226 A1 NL 930066 I1	01-07-1992 01-09-1993